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Two new species of Eumeninae from Iran (Hymenoptera: Vespidae)

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A b s t r a c t : Two new species of Hymenoptera: Vespidae: Eumeninae, *Pterocheilus persicus* GUSENLEITNER & FALLAHZADEH nov.sp. and *Eustenancistrocerus (Parastenancistrocerus) iranicus* GUSENLEITNER nov.sp., are described and illustrated, and diagnostic characters are provided for them.

Key words : Iran, Eumeninae, *Pterocheilus*, *Eustenancistrocerus*, new species.

Introduction

The present article continues a series of publications dealing with the Iranian wasp fauna in the family Vespidae (GUSENLEITNER 1973, 1976, 1985, 1986, 1992, 1995, 1998, 2000, 2001, 2006). Two new species are described, mainly from the southern part of Iran. The holotypes are deposited in the Biology Centre of Oberösterreichisches Landesmuseum (OLM) and the paratypes are housed in the insect collection of Islamic Azad University, Jahrom Branch, Jahrom, Iran.

Taxonomy

***Pterocheilus persicus* GUSENLEITNER & FALLAHZADEH nov.sp. (Figs 1-4)**

Holotype : Iran, Fars, Larestan, 870m, 27°32'N 54°22'E, ♀, 5.7.2012, leg. A. Falahatpishe, coll. OLM. **Paratypes :** Iran, Fars, Niriz, 1795m, 29°16'N 54°19'E, ♀, 16.9.2012, leg. M. Khosroabadi; Fars, Darab-Fathol Mobin, 1511m, 28°40'N 54°50'E, ♀, 8.7.2012, leg. A. Haghighi; both coll. Dept. Entom., Jahrom Branch, Islamic Azad Univ., Jahrom, Iran.

Diagnosis: *Pterocheilus persicus* (fig. 1) is similar to *Pterocheilus dives* RADOSZKOWSKI 1876 (fig. 5), but differs in colouration; the pronotum is longer, the first tergite is stronger and the second sternite is more densely punctured than in *P. dives*. The occipital carina is lamellated in *P. persicus*.

Description: Primary colour black, with yellow colouring distributed as follows: mandibles nearly completely, labrum, clypeus (except for translucent anterior margin), and orbital bands from sinus to clypeus; one small dot above the antennae; antennal scape except for apical end; big dots present on the temples and the dorsal surface of the

pronotum; patches on the upper part of the mesopleurae; tegulae except for the translucent margins and the disk; two dots on scutellum; a transverse band on postscutellum; claps on the sides of the scutellum and postscutellum present to tegulae; two patches on the metanotum; legs (the base of femora III and the trochanters black except for small yellow dots); broad, laterally enlarged apical bands on first and second tergites; a bisinuate narrow band on third tergite; tergites 4 to 6 totally, and the first sternite and other sternites almost completely yellow. Three red spots present in the middle of second sternite (fig. 4). Wings pale, with dusky radial cells.

Clypeus (fig. 2) much broader than long (5,0 : 3,0) and the straight „emargination“ is longer than distance between the antennal grooves. Disc of clypeus strongly punctured; spaces between the dots are glossy and similar in size to the punctures. Clypeus covered with microscopical white pubescence. Frons very densely punctured with small spots. Vertex and temples slightly punctured. On pronotum, mesonotum, mesopleurae and scutellum the dots are coarser and fewer than on the face. The posterior part of postscutellum has no punctures. Lateral edges of pronotum with spikes. Mesonotum has a prescutal furrow (extending from scutellum to close to middle of mesonotum). Propodeum sides rounded and uniformly punctured; only the lower part of each side is finely cross-stripped. Discs of tegulae and legs glossy, without punctures.

Dots on the first tergite (fig. 3) not as coarse as those on mesonotum; the intervals between the dots have microscopical dots. Second tergite has a few, not very coarse, microscopical dots. Tergites 3 to 6 also have fine microscopical dots. Sternites 2 to 6 glossy, with scattered punctures (fig. 4).

Head and thorax with long, wavy, white hairs; abdomen with only microscopical pubescence.

Body length: 9 mm.

Male unknown.

Etymology: The name is derived from Persia, the area of origin.

***Eustenancistrocerus (Parastenancistrocerus) iranicus* GUSENLEITNER nov.sp. (Figs 6-9)**

H o l o t y p e : Iran, Fars, Larestan, 870m, 27°32'N 54°22'E, ♂, 30.11.2012, leg. A. Falahatpishe, coll. OLM. **P a r a t y p e s :** Same data as holotype, 1♂; Iran, Fars, Darab, 1124m, 28°42'N 54°34'E, 2♂♂, leg. A. Haghighi; all in coll. Dept. Entom., Jahrom Branch, Islamic Azad Univ., Jahrom, Iran.

Diagnosis: This species belongs to the group of *Eustenancistrocerus (Parastenancistrocerus) amadanensis* (DE SAUSSURE 1863) and is very similar to *Eustenancistrocerus (Parastenancistrocerus) khuzestanicus* GIORDANI SOIKA 1970. But the species described here differs in the form of the last segments of the antennae (Giordani Soika 1970, p. 98) and the second tergite is simply truncate and not extendedly rounded (fig. 10). The occipital carina narrowly lamellated but in *P. khuzestanicus* not lamellated.

Description: *E. iranicus* (fig. 6) is black with nearly white markings, distributed as follows: mandibles except for black teeth; labrum; clypeus; top part of face up to the ocelli; antennal scape; first and last segments of the flagellum; temples and pronotum completely; a dot on mesonotum in front of scutellum; mesopleurae nearly completely; tegulae except for two translucent dots and a translucent margin; parategulae; scutellum

and postscutellum completely; two large and two small patches on each side of propodeum; legs; first tergite except for the front; an apical band on second tergite, attached to big patches at the sides; bisinuate apical bands on tergites 3 to 6; first and second sternites completely, and sternites 3 to 6 with bisinuate apical bands. Wings pale, without dusky parts.

Clypeus (fig. 7) wider than long (2,2 : 1,7), emargination flat (length : depth = 1,5 : 0,3), and broader than distance between antennal grooves (length : depth = 1,5 : 1,2). Clypeus coarse and densely punctured, except for a sparsely punctured, narrow band at the base. Puncturation of frons, vertex and temples similar to that of clypeus. Antennal scapes glossy, with only a few microscopical punctures. Last segment of flagellum long and narrow (fig. 1). Pronotum, mesonotum, scutellum and mesopleurae much more coarsely punctured than face. Frontal border between horizontal and vertical part of pronotum lamellated like occipital carina. Postscutellum very finely sculptured. Propodeum with coarse punctures, only the concavity shows microscopical striation. Tegulae and legs glossy, without punctures.

Puncturation of first tergite very similar to that of scutellum; transverse carina with a central depression. Second tergite uniform and densely punctured. Third tergite densely punctured and indented in the middle (fig. 8, 10); other tergites more finely but not as densely punctured. In profile, second sternite flat, sloping steeply to the basal furrow, with dense, deep puncturation similar to that on second tergite. Tergites 3 to 7 more finely punctured than second tergite, with glossier intervals. The whole insect has a microscopical pubescence that is difficult to see.

Body length: 5 mm.

F e m a l e : unknown.

E t y m o l o g y : The name is derived from the country of origin, Iran.

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Zusammenfassung

Zwei neue Eumeninae-Arten (Hymenoptera: Vespidae) aus dem Iran werden beschrieben: *Pterocheilus persicus* nov.sp. und *Eustenancistrocerus* (*Parastenancistrocerus*) *iranicus* nov.sp.

References

- GIORDANI SOIKA A. (1970): Contributo alla conoscenza degli Eumenidi del Medio Oriente (Missione Giordani Soika in Iran 1965 III). — Boll. Mus. Civ. Stor. Nat. Venezia **20-21**: 27-183.
- GUSENLEITNER J. (1973): Masariden aus dem Nahen Osten (Hym., Vespoidea). — Boll. Mus. Civ. Stor. Nat. Venezia **24**: 55-69.

- GUSENLEITNER J. (1976): Bemerkenswertes über Faltenwespen. VI. — Nachr.Bl. Bayer. Ent. **5**: 112-119.
- GUSENLEITNER J. (1985): Neue *Leptochilus*-Arten aus dem Mittelmeergebiet und dem Iran (Hym., Eumenidae). — Entomofauna **6**: 81-101.
- GUSENLEITNER J. (1986): Drei neue *Alastor*-Arten aus dem Iran (Hym., Eumenidae). — Entomofauna **7**: 29-39.
- GUSENLEITNER J. (1992): Bemerkenswerte Funde von Masaridae in Griechenland und im Nahen Osten. — Linzer biol. Beitr. **24** (1): 59-63.
- GUSENLEITNER J. (1995): Bemerkungen über die Gattung *Leptochilus* SAUSSURE 1852 und Beschreibung neuer Arten dieser Gattung (Hymenoptera, Vespoidea, Eumenidae). — Linzer biol. Beitr. **27** (1): 169-181.
- GUSENLEITNER J. (1998): Über Faltenwespen aus dem asiatischen Raum (Hymenoptera, Eumenidae, Masaridae). — Linzer biol. Beitr. **30** (2): 503-513.
- GUSENLEITNER J. (2000): Neue Eumenidae aus Syrien, der Türkei und dem Iran (Hymenoptera, Vespoidea). — Linzer biol. Beitr. **32** (2): 927-938.
- GUSENLEITNER J. (2001): Über die Gattung *Labochilus* BLÜTHGEN 1939 (Hymenoptera, Vespoidea, Eumenidae). — Linzer biol. Beitr. **33** (2): 677-687.
- GUSENLEITNER J. (2006): Eine neue *Eumenes*-Art aus dem Iran (Hymenoptera: Vespidae: Eumeninae). — Linzer biol. Beitr. **38** (2): 1361-1363.

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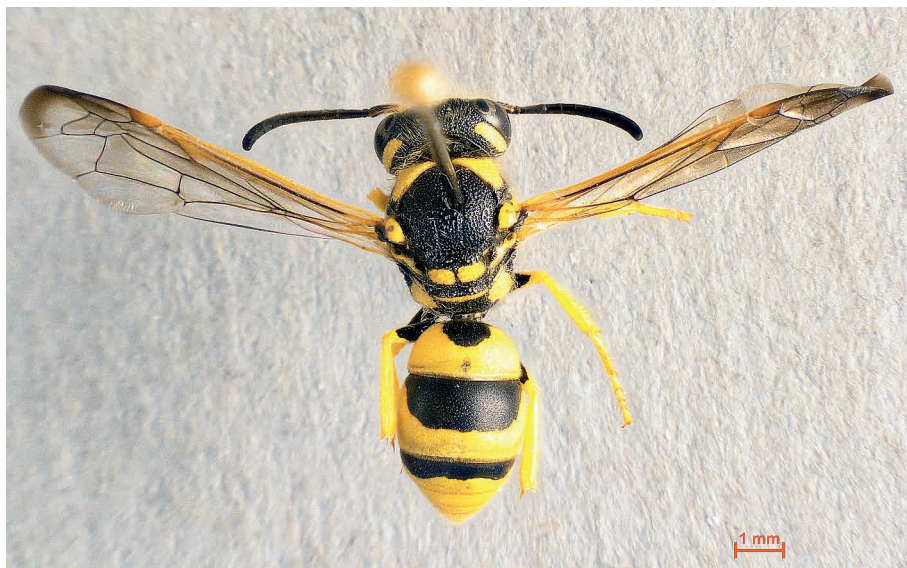


Fig. 1: *Pterocheilus persicus* nov.sp. ♀, habitus.



Fig. 2: *Pterocheilus persicus* nov.sp. ♀, clypeus.



Fig. 3: *Pterocheilus persicus* nov.sp. ♀, first tergite.



Fig. 4: *Pterocheilus persicus* nov.sp. ♀, sternites.



Fig. 5: *Pterocheilus dives* RADOSZKOWSKI ♀, habitus.



Fig. 6: *Eustenancistrocerus iranicus* nov.sp. ♂, habitus.



Fig. 7-10: (7) *Eustenancistrocerus iranicus* nov.sp. ♂, clypeus; (8) *Eustenancistrocerus iranicus* nov.sp. ♂, last segment of flagellum; (9) *Eustenancistrocerus iranicus* nov.sp. ♂, second and third tergites; (10) *Eustenancistrocerus khuzestanicus* GIORDANI SOIKA, ♂, second and third tergites. Scale bar: figs. 7, 9, 10: 0,1 mm, fig. 8: 0,5 mm.